



# SECURECOM

## THERMOSTAR W4G

**Mobile app-based online thermometer with temperature alarm, thermostat function and remote monitoring module.**

### KEY FEATURES

- **Temperature measurement in real time**, i.e. the actual temperature measured by an external thermometer probe connected to the device is continuously sent to the user's phone via the internet.
- **Sending an alarm notification** in the form of a "push notification" message with an acoustic alert to the phones of the users concerned, in case the set (upper/lower) temperature threshold is exceeded.  
The alert tone is repeated until one of the users acknowledges the notification on their phone.
- **Automatic thermostat function** which can be set to **COOLING** or **HEATING** and the function can be remotely enabled or disabled.
- **Send status of inputs** from 2 independent inputs to the mobile application or monitoring receiver.
- **Send all events from the device to up to 2 remote monitoring receivers** with unique event codes according to SIA DC-09, e.g. if the alarm temperature threshold is exceeded and reset.

### TECHNICAL DETAILS

- Measurement range:  $-55^{\circ}\text{C}/+125^{\circ}\text{C}$  ( $\pm 0.5^{\circ}\text{C}$ )
- Mobile data communications: 4G (LTE Cat1)
- WIFI communications: 2.4GHz (IEEE 802.11 b/g/n)
- 2 contact inputs, with independent signalling
- 1 relay output, NO type, potential free contact
- Notification for PULOWARE application and remote monitoring (via SIA DC-09 protocol)
- USB connection for PC setup: USB 2.0 mini-B
- Full remote management function (via puloware.com)
- SIM card type: nano-SIM (4FF)
- Power supply: 10-30V DC / max. current 500mA
- Operating temperature of the device:  $-25^{\circ}\text{C}$  /  $+50^{\circ}\text{C}$
- Dimensions: 77x90x20mm

### APPLICATION AREAS

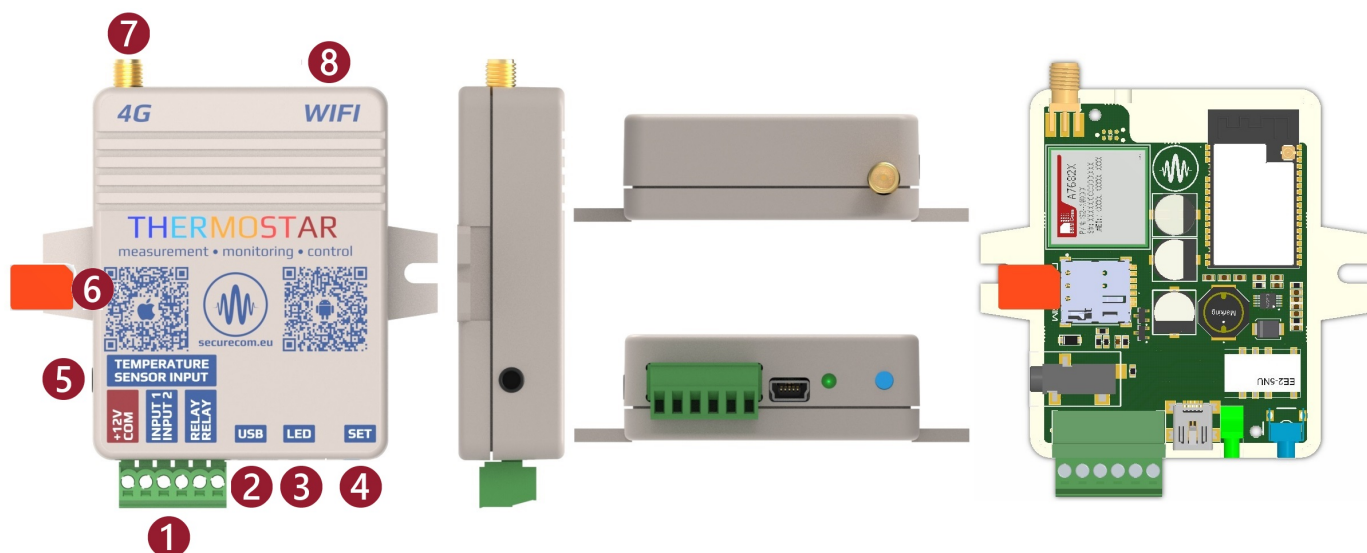
- Temperature monitoring in real time, from mobile App
- Automatic control of cooling or heating (thermostat), with remote enable and disable
- Alarm for exceeding lower and upper temperature
- Alarm from contact input
- Record the user acknowledging the alert in an event list
- Temperature monitoring in extreme environments (IP68) eg. food, agriculture, building engineering, etc.

### PACKAGE CONTENTS

- THERMOSTAR W4G device
- External thermometer probe
- 4G antenna
- AC power supply
- USB 2.0 mini-B cable
- Warranty



## APPEARANCE



### 1 Pinout of the pluggable system connector

+12V	COM	INPUT 1	INPUT 2	RELAY	RELAY
The positive input of the supply voltage.	The negative input of the supply voltage.	Contact controlled input which can be connected to <b>COM</b> pin	Contact controlled input which can be connected to <b>COM</b> pin	Control relay outputs for thermostat function. The relay is potential free and the switching is relative to each other.	
Voltage range: <b>10-30V DC</b>		<b>NO</b> type	<b>NO</b> type	Switching power: <b>maximum 60V / 1A</b>	

- 2 USB mini B connector for PC configuration
- 3 LED indicator for monitoring of operating status
- 4 SET button to set up WIFI connection and reset factory settings
- 5 Thermometer probe connector
- 6 Built-in SIM card holder for mobile network connection
- 7 Antenna connector for 4G network
- 8 Built-in WIFI antenna (avoid metallic shielding of the top of the device)

## LED STATUS INDICATOR

The LED indicator at the bottom of the enclosure shows the status of the WIFI network connection.

<b>Continuous red</b>	WIFI connection not configured (factory default) or factory reset occurred
<b>Flashing red</b>	Connection in progress Incorrect WIFI setting No internet connection on the router
<b>Flashing green</b>	NORMAL operation, WIFI and internet connection OK
<b>Alternating green/red</b>	Entered HOTSPOT mode, setup in progress via WIFI connection

**Attention:** In case the flashing red light does not change, but the configured WIFI network is Internet capable with other devices, you need to check the connection settings in the PC configurator!

## INSTALLATION

- SIM insertion: with the contact face down and the impacted corner facing the SIM holder, as shown in the figure (as the device can also work in WIFI mode, the SIM card is not a functional requirement)
- Connect the antenna and system connector as described above

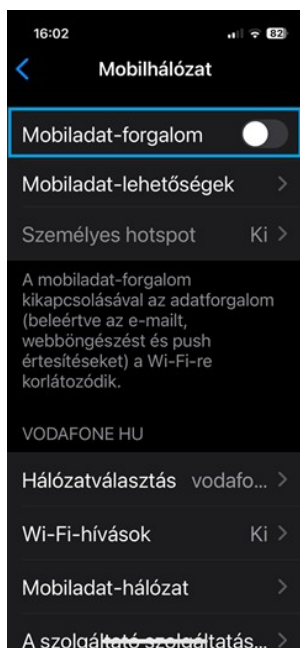
## SETTINGS

One way to set up communication is via a web page broadcast by the WIFI hotspot.

To do this, you need to access the device's own WEB page by briefly pressing the SET button **4**. The alternating flashing green/red light then indicates the "HOTSPOT" mode, in which the device broadcasts its own WIFI network called SECURECOM DEVICE to set up the Internet connection. This network is connected to a WIFI-enabled phone or computer and a WEB browser can be used to access the WEB page containing the settings.

### Accessing the unit's WEB site and steps to set up the connection

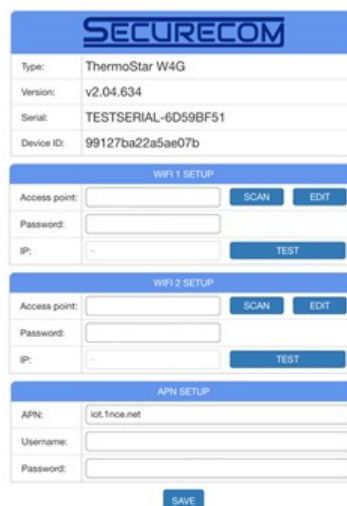
- Press the SET button briefly so that the status light flashes alternately green/red.
- Search for the name **SECURECOM DEVICE** in the WIFI networks and connect to it.  
**IMPORTANT:** turn off mobile internet access from your phone during setup, otherwise your device's website may be replaced by a website hosted on the internet.
- After a successful connection, the WEB browser will show a pop-up window with the settings screen. If the browser does not pop up, enter the browser and go to **wifisetup.eu** where the page is available and enable the following settings:



a.



b.



c.

## Setting up a WIFI connection

Press the **SCAN** button to list the available networks, select the appropriate network and enter the network password.

Press the **TEST** button to check the success of the connection. If the password is correct, the device will receive a subnet IP address. If it does not receive an address, either the password is incorrect or the connection is lost.

Press the **SAVE** button to save settings and return to normal mode.

## Set up mobile data connection (4G LTE)

In addition to WIFI, the product can also communicate with a mobile data connection, so a SIM card with mobile internet capability is required. To set up the connection, a suitable SIM card must be inserted in the SIM card holder marked **6**, which meets the following requirements:

- capable of mobile data traffic
- SIM internet APN required
- PIN required

The SIM PIN code field must be filled in if the PIN code request is set on the SIM card.

To establish the data connection, you will need to enter your APN details (usually no user and password, just the APN name).

Press the **SAVE** button to save settings and return to normal mode.

**If the product is only used with a mobile app and you do not want to set it up for remote monitoring, it does not require any more settings.**

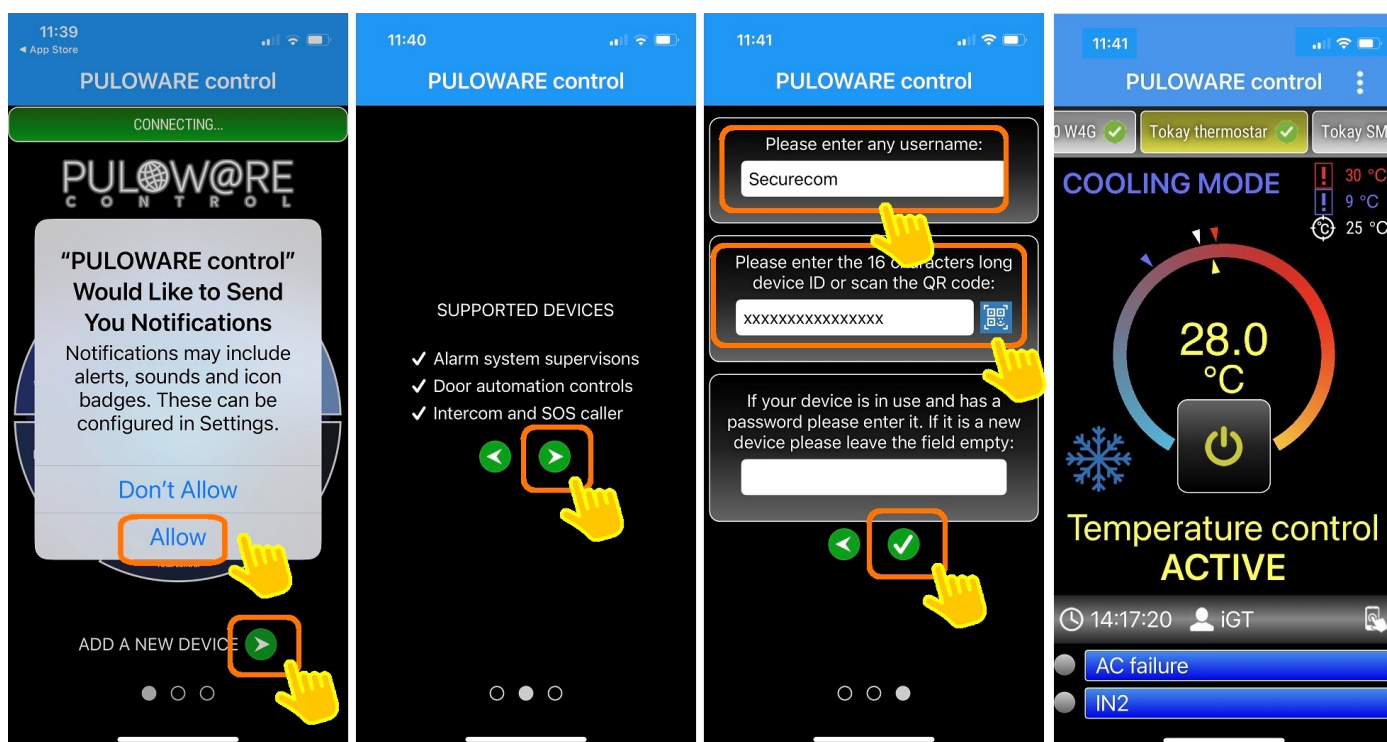
**If you need connection to monitoring receiver, download the Securecom Configurator software for detailed configuration from <https://www.securecom.eu/en/application-notes>**

All that is left is to install the application and the product will be ready to use for the task.

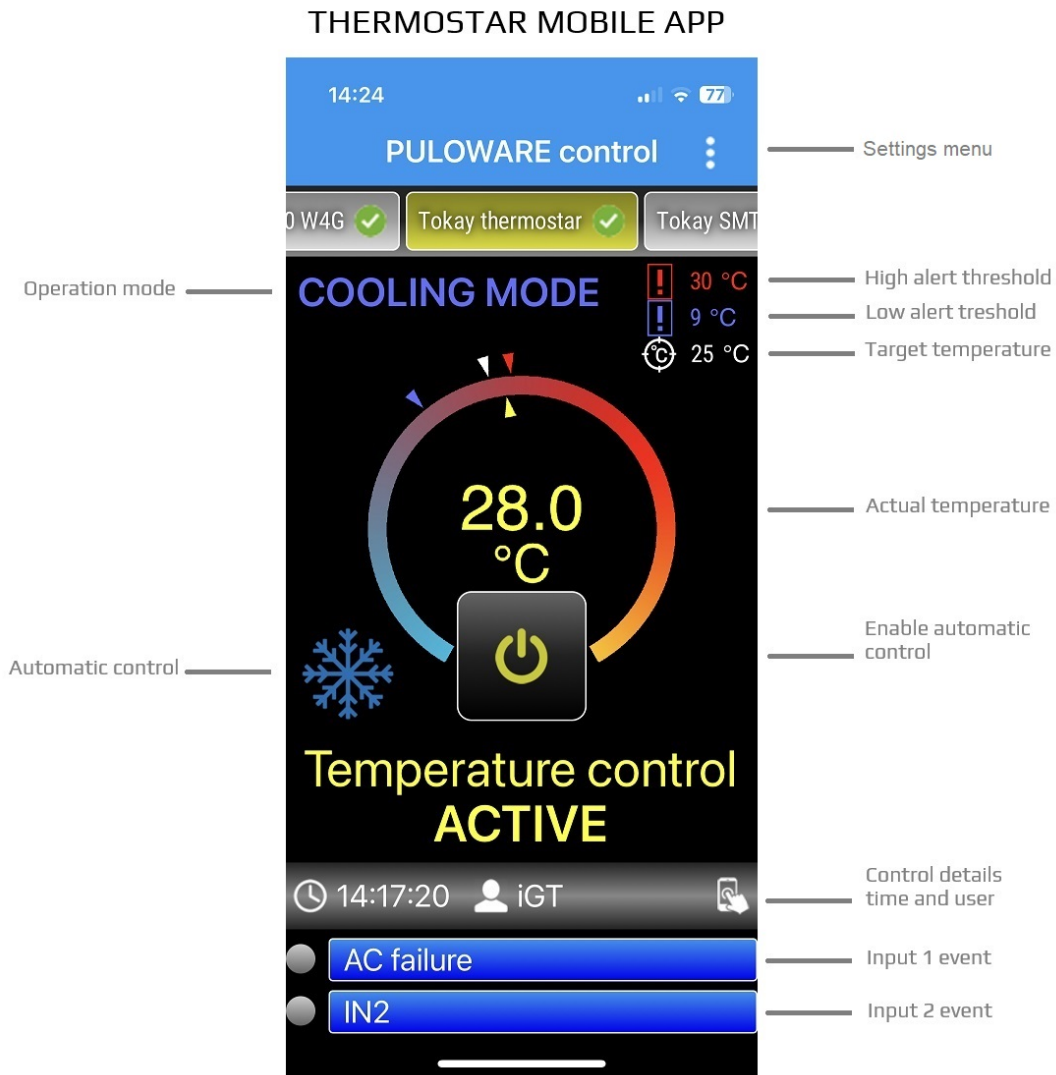
## INSTALLING PULOWARE MOBILE APP

The PULOWARE mobile App is a free application which can be downloaded to any smartphone, based on the phones platform (**Google Play or App Store**). Start the application and follow the next steps.

1. Allow the pop up window
2. Press the green arrow icon to move to the next page
3. Press again the green arrow icon to move to the next page
4. Enter any username that would identify your phone ( you)
5. Enter the 16 character long Device ID. This number can be found on the sticker placed at the back of the device, or on the quick start in the box. You can enter the number manually or scan the QR code to enter it. For that, you must tap the blue icon with form of a QR code to open the reader and after that present the Device ID QR to the smartphone camera. Finally, enter the device password. **By default, there is no password for devices so leave the password field empty when a new device is assigned.** A device password can be added, changed or deleted on the **puloware.com** web site, after the device is added to the users account. If a password was once assigned to a device, it can not be added to any account or smartphone app without that password.
6. Press the green checkmark icon to add the device to your smarthphone.



# MOBILE APP USER INTERFACE

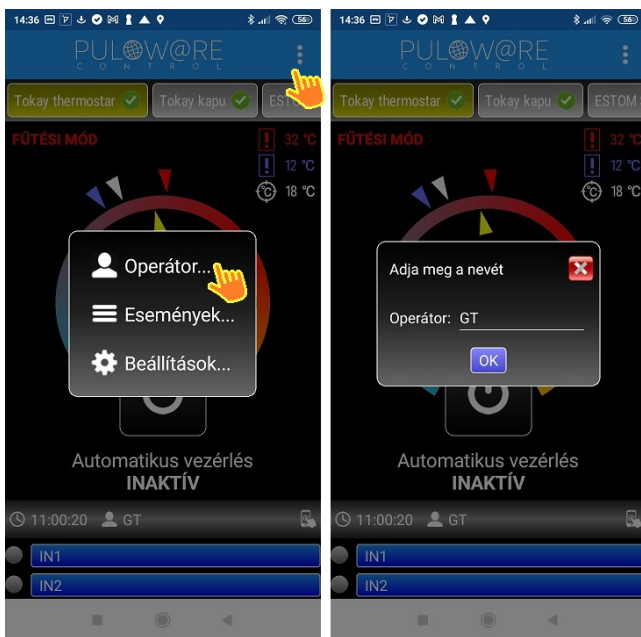


- Settings menu** here are the settings and the event list
- Operation mode** the application handles 2 modes of operation such as **HEATING MODE** and **COOLING MODE**
- HEATING MODE** if the temperature of the room or object falls below the set temperature, the relay contact closes
- COOLING MODE** if the temperature of the room or object exceeds the set temperature, the relay contact closes
- High alert threshold** if the temperature reaches or exceeds it, an alarm is generated
- Low alert threshold** if the temperature reaches or falls below the value, an alarm is generated
- Target temperature** the temperature target value up to which the automatic function controls the output relay of the device, if the function is enabled
- Actual temperature** the value measured by the thermometer probe in real time
- Enable automatic control** tap to enable the automatic thermostat function
- Automatic control** indicates the need for control if the target temperature is not appropriate
- Control details** the bar shows the name of the person handling/modifying the control or the person acknowledging the alarm, identified by a time stamp
- Input 1 event** display of contact events of the inputs
- Input 2 event** display of contact events of the inputs

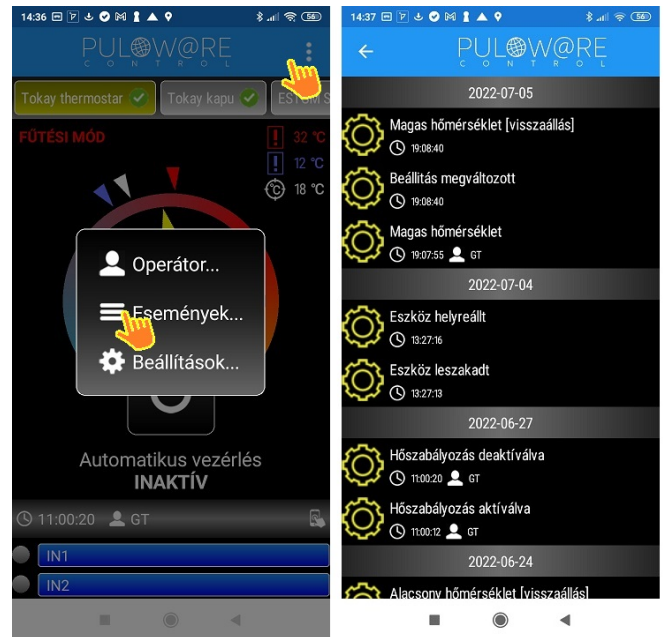
# Application MENU

The menu contains 3 main parts:

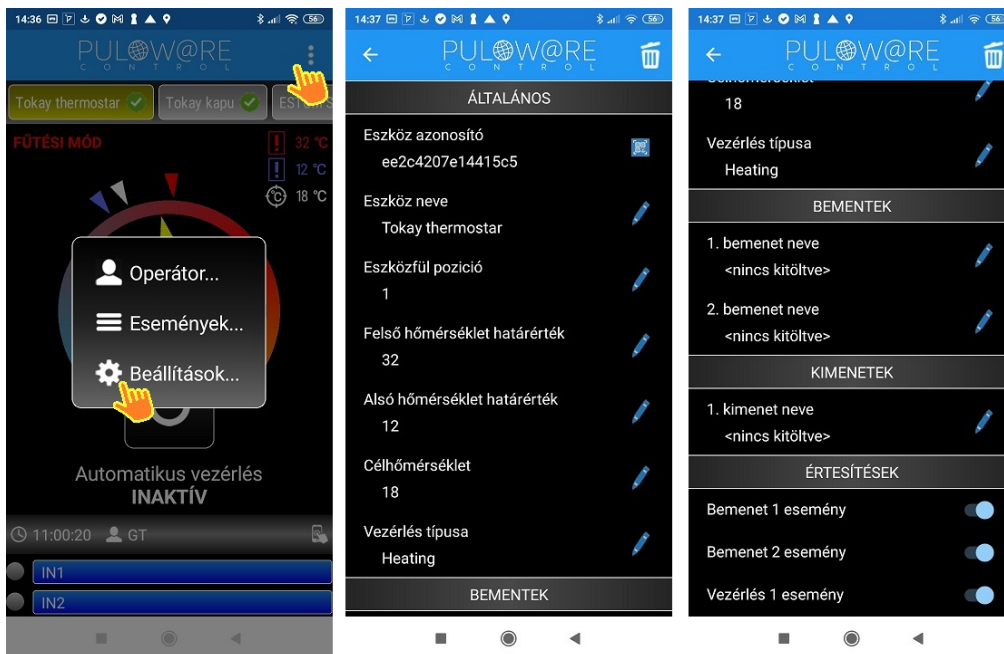
## - Operator name modification



## - View event list



## - Settings



## Items in the Settings menu:

### GENERAL

- **Device ID:** unique 16 character identifier of the product
  - **Device name:** unique name by which the end user identifies the object (e.g. house, workshop)
  - **Tab position:** if more than one product is used, the position of the device field in the queue
  - **High temperature alarm:** alarm if the setpoint is exceeded
  - **Low temperature alarm:** alarm if the value falls below the set value
  - **Set temperature:** the expected temperature value, controlled by the automatic control function via the device relay (switches when cooling or heating is required, depending on the setting)
  - **Control type:** operating mode switch
- HEATING MODE:** if the room or object temperature falls below the set temperature, the relay contact closes  
**COOLING MODE:** if the temperature of the room or object exceeds the set temperature, the relay contact closes

### INPUTS

- **Input 1 name:** status indication of an appliance connected to the input of the appliance (e.g. boiler fault)
- **Input 2 name:** status indication of an appliance connected to the input of the appliance (e.g. power outage)

### NOTIFICATIONS

- **Input 1 event:** enable or disable notification from input 1
  - **Input 2 event:** enable or disable notification from input 2
  - **Control event:** enable or disable notification from temperature control
- Attention:** The temperature alarm notification cannot be switched off!

## REMOTE MANAGEMENT

All the advanced features of the THERMOSTAR W4G are available via the IoT cloud-based server, accessible via [www.puloware.com](http://www.puloware.com), but registration is required to use the website. Once registered, the device ID of the communicator must be added to the account to manage it.

## REMOTE MONITORING SETTINGS

MONITORING STATION 1 SETTINGS	
IP address:	siatest.securecom.€
Port:	9999
Protocol:	TCP ▾
SIA prefix:	
Object identifier:	6700
Replace obtained identifier:	YES ▾
Dialed number by alarm system:	
Link test period:	3 mins ▾
Link test code:	

IP address or domain name of the monitoring station
Receiving port number of the monitoring station's IP address
Selectable communication IP protocol: TCP, UDP
2 characters long, it is used if the monitoring station requires identifier with 6 characters
Identifier used when reporting of personal events
Not used
Not used
The test report will be sent to MS in intervals that are set in this field
The CID code that is sent as test report. If the value is empty, the test reports will be created as „nulltest“ (an empty code)

HEATING SETTINGS	
Alarm:	30 °C
Event code:	158
Partition:	01
Zone:	001
Control threshold:	
Relay control type:	
Relay control enable:	

COOLING SETTINGS	
Alarm:	13 °C
Event code:	159
Partition:	01
Zone:	001
Control threshold:	17 °C
Relay control type:	Heating ▾
Relay control enable:	Disabled ▾

Alarm thresholds
Event codes in the alert message
Partition ID
Zone ID
Not used
Operation mode
Operation mode